

Update on 2008 Carbon Sequestration Atlas of the United States and Canada



Regional Carbon Sequestration Partnerships Annual Review Meeting

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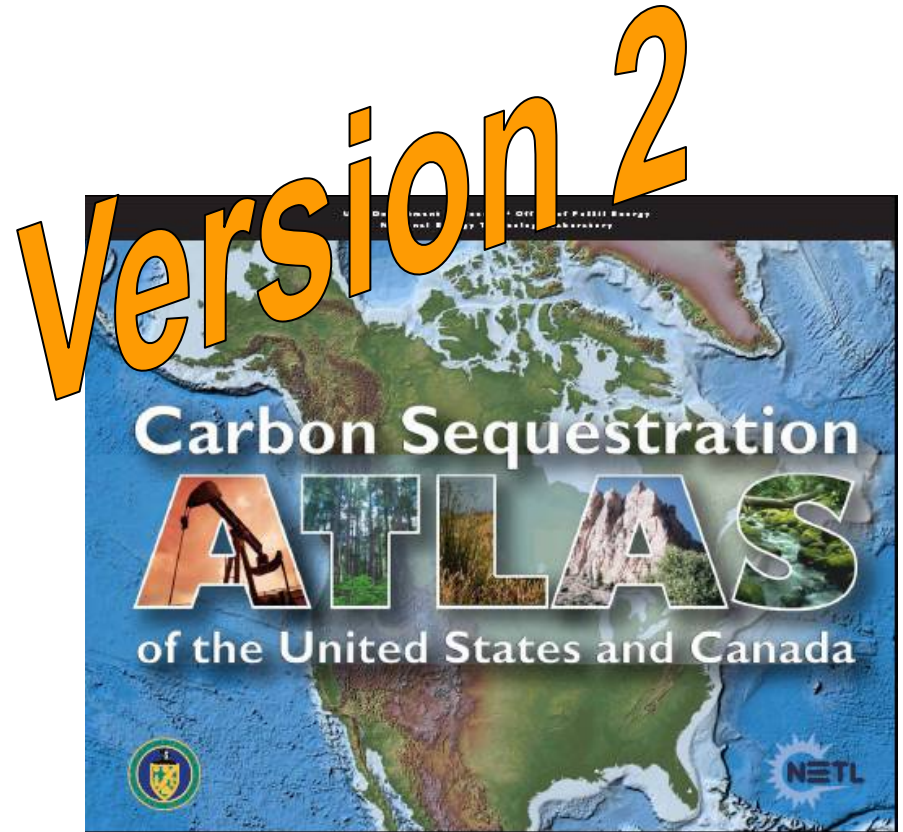


Office of Fossil Energy



2008 Carbon Sequestration Atlas of the United States and Canada – Version 2

- DOE released the first version of the Carbon Sequestration Atlas of the U.S. and Canada in 2007
- 2008 Atlas (Version 2) is under development; expected release in November 2008
- Focus is to add information on CO₂ stationary source emissions, add additional basins and formations for CO₂ storage, and provide definitions of CO₂ resource vs. CO₂ capacity



2008 Atlas Schedule

- **Current** – 2008 Storage Estimate Methodologies document under peer review; 2008 Stationary Emissions Estimation document being finalized
- **April 2008** – Request for CO₂ storage estimates, CO₂ stationary source information, maps, and Region specific information out to Partnerships
- **June 2008** – Partnership information due to DOE
- **August 2008** – Draft 2008 Atlas complete and out for comments
- **November 2008** – 2008 Atlas released



CO₂ Stationary Source Emission Estimation

- Summarizes the calculations, emission factors, and databases used by the Regional Partnerships
- Sources include: power plants, ethanol plants, petroleum and natural gas processing facilities, cement and lime plants, agricultural processing facilities, industrial facilities, iron and steel production facilities, and fertilizer producing facilities
- Approach was to identify significant CO₂ emission sources within each region and assess the availability of CO₂ emission data



Methodology for Development of Geologic Storage Estimates for Carbon Dioxide – 2008 Atlas

- Designed to integrate results of data compiled by Regional Partnerships
- CO₂ resource estimates – volumetric estimates of geologic storage reflecting only physical and chemical constraints
- CO₂ capacity estimates – highest degree of certainty of geologic storage with present economic and regulatory considerations included



CO₂ Stationary Sources – 2008 Atlas

- **CO₂ Sources** – *Melanie Jensen, UND EERC*

Geologic Environments Assessed – 2008 Atlas

- **Oil and Gas Fields** – *Tim Carr, West Virginia University*
- **Coal Seams** – *John Rupp, Indiana Geological Survey*
- **Saline Formations** – *Scott Frailey, Illinois State Geological Survey*

